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PTO/SB/05 (03-01)

Approved for use through 10/31/2002. OMB 0651-0032

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|--|---------------------------------------|--|
| <b>UTILITY<br/>PATENT APPLICATION<br/>TRANSMITTAL</b><br><br><small>(Only for new nonprovisional applications under 37 C.F.R. 1.53(b))</small> | <b>Attorney Docket No.</b> 40296-0013 |  |
|  | <b>First Inventor</b>                 | Sang Sic YOON  |
|  | <b>Title</b>                          | DIGITAL CONTROL LOGIC CIRCUIT HAVING A CHARACTERISTIC OF TIME HYSTERESIS |
|  | <b>Express Mail Label No.</b>         |  |


|  |   |
|--|---|
| <b>APPLICATION ELEMENTS</b><br><small>See MPEP chapter 600 concerning utility patent application contents.</small> | <b>ADDRESS TO:</b> Assistant Commissioner for Patents<br>Box Patent Application<br>Washington, DC 20231 |
|--|---|


|   |   |
|---|---|
| <p>1. <input checked="" type="checkbox"/> <b>Fee Transmittal Form</b> (e.g., PTO/SB/17)<br/><small>(Submit an original and a duplicate for fee processing)</small></p> <p>2. <input type="checkbox"/> Applicant claims small entity status.<br/>See 37 CFR 1.27.</p> <p>3. <input checked="" type="checkbox"/> <b>Specification</b> [Total Pages <span style="border: 1px solid black; padding: 0 5px;">14</span>]<br/><small>(preferred arrangement set forth below)</small><br/>- Descriptive title of the Invention<br/>- Cross Reference to Related Applications<br/>- Statement Regarding Fed sponsored R &amp; D<br/>- Reference to sequence listing, a table, or a computer program listing appendix<br/>- Background of the Invention<br/>- Brief Summary of the Invention<br/>- Brief Description of the Drawings (if filed)<br/>- Detailed Description<br/>- Claim(s)<br/>- Abstract of the Disclosure</p> <p>4. <input checked="" type="checkbox"/> <b>Drawing(s)</b> (35 U.S.C. 113) [Total Sheets <span style="border: 1px solid black; padding: 0 5px;">8</span>]</p> <p>5. <b>Oath or Declaration</b> [Total Pages <span style="border: 1px solid black; padding: 0 5px;">3</span>]<br/>a. <input checked="" type="checkbox"/> Newly executed (original or copy)<br/>b. <input type="checkbox"/> Copy from a prior application (37 CFR 1.63 (d))<br/><small>(for a continuation/divisional with Box 18 completed)</small><br/>i. <input type="checkbox"/> <b>DELETION OF INVENTOR(S)</b><br/><small>Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).</small></p> <p>6. <input type="checkbox"/> Application Data Sheet. See 37 CFR 1.76</p> | <p>7. <input type="checkbox"/> CD-ROM or CD-R in duplicate, large table or Computer Program <i>(Appendix)</i></p> <p>8. Nucleotide and/or Amino Acid Sequence Submission <i>(if applicable, all necessary)</i><br/>a. <input type="checkbox"/> Computer Readable Form (CRF)<br/>b. Specification Sequence Listing on:<br/>i. <input type="checkbox"/> CD-ROM or CD-R (2 copies); or<br/>ii. <input type="checkbox"/> paper<br/>c. <input type="checkbox"/> Statements verifying identity of above copies</p> <p><b>ACCOMPANYING APPLICATIONS PARTS</b></p> <p>9. <input checked="" type="checkbox"/> Assignment Papers (cover sheet &amp; document(s))</p> <p>10. <input type="checkbox"/> 37 C.F.R. §3.73(b) Statement <input checked="" type="checkbox"/> Power of Attorney<br/><small>(when there is an assignee)</small></p> <p>11. <input type="checkbox"/> English Translation Document <i>(if applicable)</i></p> <p>12. <input type="checkbox"/> Information Disclosure Statement (IDS)/PTO-1449 <input type="checkbox"/> Copies of IDS Citations</p> <p>13. <input checked="" type="checkbox"/> Preliminary Amendment</p> <p>14. <input checked="" type="checkbox"/> Return Receipt Postcard (MPEP 503)<br/><small>(Should be specifically itemized)</small></p> <p>15. <input checked="" type="checkbox"/> Certified Copy of Priority Document(s)<br/><small>(if foreign priority is claimed)</small></p> <p>16. <input type="checkbox"/> Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.</p> <p>17. <input type="checkbox"/> Other: _____</p> |
|---|---|

18. If a **CONTINUING APPLICATION**, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation      ☐ Divisional      ☐ Continuation-in-part (CIP)      of prior application No: \_\_\_\_\_ / \_\_\_\_\_  
Prior application information: Examiner \_\_\_\_\_      Group / Art Unit: \_\_\_\_\_

For **CONTINUATION** or **DIVISIONAL APPS** only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

|   |                             |  |              |   |              |
|---|-----------------------------|--|--------------|---|--------------|
| <b>17. CORRESPONDENCE ADDRESS</b>                                     |                             |  |              |   |              |
| <input checked="" type="checkbox"/> Customer Number or Bar Code Label |                             | <div style="border: 1px solid black; padding: 5px; display: inline-block;"><br/>26633</div> |              | <input type="checkbox"/> Correspondence address below |              |
| <small>(Insert Customer Number or Bar Code Label here)</small>        |                             |  |              |   |              |
| Name  | PATENT TO BE MADE BY OFFICE |  |              |   |              |
| Address   |                             |  |              |   |              |
| City  |                             |  | State        | Zip Code  |              |
| Country   | Telephone                   |  | 202-912-2000 | Fax   | 202-912-2020 |

|                   |   |                                   |                       |
|-------------------|---|-----------------------------------|-----------------------|
| Name (Print/Type) | Johnny A. Kumar   | Registration No. (Attorney/Agent) | 34,649                |
| Signature         |  |                                   | Date<br>June 30, 2003 |

**FEE TRANSMITTAL  
for FY 2003**

Effective 01/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27**TOTAL AMOUNT OF PAYMENT** (\$ 790.00)**Complete if Known**

|                      |               |
|----------------------|---------------|
| Application Number   | Unassigned    |
| Filing Date          | June 30, 2003 |
| First Named Inventor | Sang Sic YOON |
| Examiner Name        | Unassigned    |
| Art Unit             | Unassigned    |
| Attorney Docket No.  | 40296-0013    |

**METHOD OF PAYMENT (check one)**☒ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None☐ Deposit Account:Deposit  
Account  
Number

08-1641 (docket number 40296-0013)

Deposit  
Account  
Name

HELLER EHRMAN WHITE &amp; McAULIFFE

The Commissioner is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☒ Credit any overpayments

☒ Charge any additional fee(s) during the pendency of this application

☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

**FEE CALCULATION****1. BASIC FILING FEE**

| Large Fee Code | Entity Fee (\$) | Small Fee Code | Entity Fee (\$) | Fee Description        | Fee Paid |
|----------------|-----------------|----------------|-----------------|------------------------|----------|
| 1001           | 750             | 2001           | 375             | Utility filing fee     | 750      |
| 1002           | 330             | 2002           | 165             | Design filing fee      |          |
| 1003           | 520             | 2003           | 260             | Plant filing fee       |          |
| 1004           | 750             | 2004           | 375             | Reissue filing fee     |          |
| 1005           | 160             | 2005           | 80              | Provisional filing fee |          |

**SUBTOTAL (1)** (\$ 750)**2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE**

| Total Claims | Extra Claims | Fee from below | Fee Paid |
|--------------|--------------|----------------|----------|
| 8            | -20** = 0    | 18             |          |
| 2            | -3** = 0     | 84             | 0        |

Multiple Dependent

| Large Fee Code | Entity Fee (\$) | Small Fee Code | Entity Fee (\$) | Fee Description   |
|----------------|-----------------|----------------|-----------------|---|
| 1202           | 18              | 2202           | 9               | Claims in excess of 20                                    |
| 1201           | 84              | 2201           | 42              | Independent claims in excess of 3                         |
| 1203           | 280             | 2203           | 140             | Multiple dependent claim, if not paid                     |
| 1204           | 84              | 2204           | 42              | **Reissue independent claims over original patent         |
| 1205           | 18              | 2205           | 9               | **Reissue claims in excess of 20 and over original patent |

**SUBTOTAL (2)** (\$ )

\*\*or number previously paid, if greater; For Reissues, see above

**FEE CALCULATION (continued)****3. ADDITIONAL FEES**

| Large Fee Code | Entity Fee (\$) | Small Fee Code | Entity Fee (\$) | Fee Description  | Fee Paid |
|----------------|-----------------|----------------|-----------------|--|----------|
| 1051           | 130             | 2051           | 65              | Surcharge - late filing fee or oath  |          |
| 1052           | 50              | 2052           | 25              | Surcharge - late provisional filing fee or cover sheet                     |          |
| 1053           | 130             | 1053           | 130             | Non-English specification  |          |
| 1812           | 2,520           | 1812           | 2,520           | For filing a request for <i>ex parte</i> reexamination                     |          |
| 1804           | 920*            | 1804           | 920*            | Requesting publication of SIR prior to Examiner action                     |          |
| 1805           | 1,840*          | 1805           | 1,840*          | Requesting publication of SIR after Examiner action                        |          |
| 1251           | 110             | 2251           | 55              | Extension for reply within first month                                     |          |
| 1252           | 410             | 2252           | 205             | Extension for reply within second month                                    |          |
| 1253           | 930             | 2253           | 465             | Extension for reply within third month                                     |          |
| 1254           | 1,450           | 2254           | 725             | Extension for reply within fourth month                                    |          |
| 1255           | 1,970           | 2255           | 985             | Extension for reply within fifth month                                     |          |
| 1401           | 320             | 2401           | 160             | Notice of Appeal   |          |
| 1402           | 320             | 2402           | 160             | Filing a brief in support of an appeal                                     |          |
| 1403           | 280             | 2403           | 140             | Request for oral hearing   |          |
| 1451           | 1,510           | 1451           | 1,510           | Petition to institute a public use proceeding                              |          |
| 1452           | 110             | 2452           | 55              | Petition to revive - unavoidable   |          |
| 1453           | 1,300           | 2453           | 650             | Petition to revive - unintentional   |          |
| 1501           | 1,300           | 2501           | 650             | Utility issue fee (or reissue)   |          |
| 1502           | 470             | 2502           | 235             | Design issue fee   |          |
| 1503           | 630             | 2503           | 315             | Plant issue fee  |          |
| 1460           | 130             | 1460           | 130             | Petitions to the Commissioner  |          |
| 1807           | 50              | 1807           | 50              | Processing fee under 37 CFR 1.17(q)  |          |
| 1806           | 180             | 1806           | 180             | Submission of Information Disclosure Stmt                                  |          |
| 8021           | 40              | 8021           | 40              | Recording each patent assignment per property (times number of properties) | 40       |
| 1809           | 750             | 2809           | 375             | Filing a submission after final rejection (37 CFR 1.129(a))                |          |
| 1810           | 750             | 2810           | 375             | For each additional invention to be examined (37 CFR 1.129(b))             |          |
| 1801           | 750             | 2801           | 375             | Request for Continued Examination (RCE)                                    |          |
| 1802           | 900             | 1802           | 900             | Request for expedited examination of a design application                  |          |

Other fee (specify)

\* Reduced by Basic Filing Fee Paid

**SUBTOTAL (3)** (\$40.00)**SUBMITTED BY**

Name (Print/Type) Johnny A. Kumar

Registration No. (Attorney/Agent)

**Complete (if applicable)**

Telephone 202.912.2000

Signature

Date

June 30, 2003